

What Is Claimed Is:

1. A method comprising:

forming at least a portion of an object by curing resin;

providing a storage device containing a liquid, the liquid

5 comprising solvent and dissolved resin, the liquid having a  
ratio of the dissolved resin to the solvent;

removing an amount of resin from the object via the liquid  
in a manner such that the amount of resin becomes dissolved in  
the liquid and thereby increases the ratio of the dissolved

10 resin to the solvent of the liquid, the increase of the ratio  
altering an electrical characteristic of the liquid; and

utilizing changes in the electrical characteristic of the  
liquid as an indicator of the ratio of the dissolved resin to  
the solvent of the liquid.

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2. A method in accordance with claim 1 wherein the curing of  
the resin in the step of forming at least the portion of the  
object occurs via a laser.

3. A method in accordance with claim 1 wherein the step of  
20 removing the amount of resin from the object comprises  
submersing the object in the liquid.

4. A method in accordance with claim 1 wherein the electrical characteristic recited in the steps is conductivity of the liquid.

5. A method in accordance with claim 1 wherein the solvent  
5 recited in the steps is Tripropylene Glycol Methyl Ether.

6. A method in accordance with claim 1 wherein the step of utilizing changes in the electrical characteristic of the liquid as an indicator of the ratio of the dissolved resin to the solvent of the liquid is performed to determine whether the  
10 ratio exceeds a desired range, and wherein the method further comprises the step of removing at least some of the liquid from the storage device and adding solvent to the storage device after determining that the ratio exceeds the desired range.

7. A method in accordance with claim 6 wherein the electrical  
15 characteristic recited in the steps is conductivity of the liquid.

8. A method in accordance with claim 1 wherein the step of utilizing changes in the electrical characteristic of the liquid as an indicator of the ratio of the dissolved resin to the  
20 solvent of the liquid comprises visually indicating different

ranges of the ratio via illumination and non-illumination of at least one light-emitting diode.

9. A method in accordance with claim 8 wherein the step of utilizing changes in the electrical characteristic of the liquid as an indicator of the ratio of the dissolved resin to the solvent of the liquid comprises visually indicating at least three different ranges of the ratio via illumination and non-illumination of at least two light-emitting diodes.

10. A method comprising:

10 forming at least a portion of an object by curing resin;  
providing a storage device containing a liquid, the liquid comprising solvent and dissolved resin, the liquid having at least one electrical characteristic;

removing an amount of resin from the object via the liquid in a manner such that the amount of resin becomes dissolved in the liquid and thereby alters the electrical characteristic of the liquid;

removing an amount of the liquid from the storage device and adding solvent to the storage device in response to a measurement of the electrical characteristic of the liquid, the solvent added to the storage device thereby altering the electrical characteristic of the liquid in the storage device.

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11. A method in accordance with claim 10 wherein the curing of the resin in the step of forming at least the portion of the object occurs via a laser.

12. A method in accordance with claim 10 wherein the step of  
5 removing the amount of resin from the object comprises submersing the object in the liquid.

13. A method in accordance with claim 10 wherein the electrical characteristic recited in the step of removing the amount of the liquid from the storage device and adding solvent to the storage  
10 device is conductivity of the liquid.

14. A method in accordance with claim 10 further comprising visually indicating different measurement ranges of the electrical characteristic via illumination and non-illumination of at least one light-emitting diode.

15 15. A method in accordance with claim 14 wherein the step of visually indicating different measurement ranges comprises visually indicating at least three different measurement ranges via illumination and non-illumination of at least two light-emitting diodes.

16. A method in accordance with claim 14 wherein the electrical characteristic recited in the step of removing the amount of the liquid from the storage device and adding solvent to the storage device is conductivity of the liquid.

5 17. A method comprising:

providing a storage device containing a liquid, the liquid comprising solvent and solute, the liquid having a ratio of the solute to the solvent;

removing an amount of material from an object via the  
10 liquid in a manner such that the amount of material becomes additional solute in the liquid and thereby increases the ratio of the solute to the solvent of the liquid, the increase of the ratio altering an electrical characteristic of the liquid; and

utilizing changes in the electrical characteristic of the  
15 liquid as an indicator of the ratio of the solute to the solvent of the liquid.

18. An assembly comprising:

a storage device that is configured and adapted to store liquid;

20 an amount of liquid stored in the storage device, the liquid comprising solvent and dissolved resin; and

a monitoring device in communication with the liquid in the  
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storage device, the monitoring device being adapted and configured to pass an electric current through at least some of the liquid and to produce a plurality of signals indicative of a plurality of conditions of conductivity of the liquid in the storage device.

19. An assembly in accordance with claim 18 wherein the monitoring device comprises at least one light-emitting diode, the light-emitting diode being configured to emit light in response to at least one of the signals produced by the monitoring device.

20. An assembly in accordance with claim 18 wherein the monitoring device is adapted and configured to produce a plurality of signals indicative of at least three conditions of conductivity of the liquid in the storage device.

21. An assembly in accordance with claim 20 wherein the monitoring device comprises at least two light-emitting diodes, the monitoring device be configured and adapted to selectively alter light emission from each of the two light-emitting diodes in a manner to display at least three separate visual identifiers, the monitoring device being further adapted and configured to display a different one of the visual identifiers

in response to each of the plurality of signals indicative of the at least three conditions of conductivity of the liquid in the storage device.